## UNITED STATES DISTRICT COURT EASTERN DISTRICT OF WISCONSIN

ALVIN BALDUS, CINDY BARBERA, CARLENE BECHEN, RONALD BIENDSEIL, RON BOONE, VERA BOONE, ELVIRA BUMPUS, EVANJELINA CLEEREMAN, SHEILA COCHRAN, LESLIE W. DAVIS III, BRETT ECKSTEIN, MAXINE HOUGH, CLARENCE JOHNSON, RICHARD KRESBACH, RICHARD LANGE, GLADYS MANZANET, ROCHELLE MOORE, AMY RISSEEUW, JUDY ROBSON, GLORIA ROGERS, JEANNE SANCHEZBELL, CECELIA SCHLIEPP, TRAVIS THYSSEN,

Civil Action File No. 11-CV-562

Plaintiffs,

Three-judge panel 28 U.S.C. § 2284

TAMMY BALDWIN, GWENDOLYNNE MOORE and RONALD KIND,

Intervenor-Plaintiffs,

v.

Members of the Wisconsin Government Accountability Board, each only in his official capacity:
MICHAEL BRENNAN, DAVID DEININGER, GERALD NICHOL, THOMAS CANE, THOMAS BARLAND, and TIMOTHY VOCKE, and KEVIN KENNEDY, Director and General Counsel for the Wisconsin Government Accountability Board,

Defendants,

F. JAMES SENSENBRENNER, JR., THOMAS E. PETRI, PAUL D. RYAN, JR., REID J. RIBBLE, and SEAN P. DUFFY,

Intervenor-Defendants,

(caption continued on next page)

### DECLARATION OF DR. KENNETH R. MAYER

# VOCES DE LA FRONTERA, INC., RAMIRO VARA, OLGA WARA, JOSE PEREZ, and ERICA RAMIREZ,

### Plaintiffs.

v.

Case No. 11-CV-1011 JPS-DPW-RMD

Members of the Wisconsin Government Accountability Board, each only in his official capacity:
MICHAEL BRENNAN, DAVID DEININGER, GERALD NICHOL, THOMAS CANE, THOMAS BARLAND, and TIMOTHY VOCKE, and KEVIN KENNEDY, Director and General Counsel for the Wisconsin Government Accountability Board,

#### Defendants.

- I, Kenneth R. Mayer, declare, under penalty of perjury and pursuant to 28 U.S.C. § 1746, that the following is true and correct:
- 1. I currently am a Professor of Political Science at the University of Wisconsin—Madison, and a faculty affiliate at the Lafollette School of Public Affairs, at the University. I joined the faculty in 1989. I teach courses on American politics, the presidency, Congress, campaign finance, election law, and electoral systems.
- 2. I have been asked by counsel representing the plaintiffs in this lawsuit to provide expert opinions in the above-captioned case. I submitted an expert report on December 14, 2011, and a rebuttal report on January 13, 2012.
- 3. On January 14, 2012, counsel for the plaintiffs asked me to provide an opinion regarding the inconsistencies between the 2010 U.S. census data used to draw the district lines under Acts 43 and 44 and the actual municipal boundaries maintained by local governments and used by the Government Accountability Board to assign registered voters to the correct

jurisdictions. This opinion is based on my review and analysis of the following information and materials:

- a. November 10, 2011 Memo to Nathaniel Robinson and Ross Hein from Sarah
   Whitt and Shane Falk, "Census Blocks Conflicting with Municipal Boundaries."
- b. Undated, Legislative Technology Services Bureau Geographic Information
   Systems (GIS) Team, "Analysis of WISE-LR and Adjusted GAB Datasets."
- c. January 13, 2012, Memo to Wisconsin Municipal Clerks, City of Milwaukee Election Commission, Wisconsin County Clerks, and Milwaukee County Election Commission, from Kevin J. Kennedy and Nathaniel E. Robinson, "Redistricting Anomalies – Municipal and Ward Boundaries."
- d. Undated, "GAB Analysis LTSB County Shape File Analysis."
- e. Various satellite images and maps used to demonstrate the anomalies.
- 4. From my review of these materials, it appears that the GAB has concluded that the census block data, which the Wisconsin legislature used as the basis for drawing legislative and congressional districts under Acts 43 and 44, includes many individual blocks that cross municipal boundaries (at the county city, town, village, or township boundaries). This is due to the fact that the census block boundaries use different geography data than what municipalities use to identify their actual boundaries. The errors in the census blocks, according to the GAB's own investigation, is typically in the range of 50 meters (or about 167 feet), but at times can be much larger.
- 5. As the November 10 memorandum from the GAB notes at page 3, the 2010 census data "contains substantial inaccuracies with administrative boundaries, specifically municipal boundaries and school district boundaries. Municipal boundary inaccuracies are usually due to either projection issues (the correct boundaries appearing in the wrong place), or

annexations that were not included in the TIGER 2010 data. According to the 2010 Census TIGER/Line® Shapefiles Technical Documentation, the positional accuracy of the TIGER 2010 data meets a standard of approximately +/- 50 meters (+/- 167 feet). This appears to have been achieved in some cases, but there are other cases where the data is off by more than 50 meters. Even if lines are within 50 meters, that margin of error allows for multiple houses to be placed in the wrong district all along the boundary line. This becomes problematic particularly for municipal boundaries, because many voters can be affected if the Census municipal boundary is 50 meters or more away from its actual location."

- 6. The practical problem is that when a legislative or congressional district boundary coincides with a municipal boundary, it is likely that a number of persons will be located in the wrong district. This means that when the Legislative Technology Services Bureau ("LTSB") used the census block files to calculate the number of persons in a district, that number will often be incorrect. While I cannot say with certainty how large the errors are, there are indications that the errors may be significant. The GAB analysis of the differences between the LTSB shape files and GAB voter files show that in Dane County, for example, 6,766 voters were improperly located (either because they live in Dane County and were identified in the LTSB files as located outside of Dane County, or because they live outside of Dane County and were identified in the LTSB files as located inside of Dane County). The GAB notes that errors are likely to have occurred in all 72 Wisconsin counties.
- 7. More importantly, page 4 of the November 10 memo notes that the GAB "analyzed the number of voters impacted by the Assembly District, Senate District, and Congressional District Boundaries and counted the number of addresses and voters that would not be in the correct legislative boundary." That analysis showed that in Dane County alone there were 934 addresses that were not found, and 1,601 voters who were not found.

- 8. The implication of these anomalies is clear: the population counts and demographic characteristics of many Assembly, Senate, and Congressional districts are almost certainly incorrect as reported by the LTSB and as used in the redistricting process (which relied on Census data as provided by the LTSB).
- 9. In my own analysis, this would have affected the opinions expressed in my December 14, 2011, and January 13, 2012 reports on compactness, core district retention, disenfranchisement, population shifts among districts, and potentially even the number of minority voters in Assembly districts in Milwaukee.
- 10. Again, although the error rates remain unclear, at the congressional level, a shift of even a handful of persons could easily change the population deviation to unacceptable levels. Because the absolute population deviation of the congressional districts in Act 44 was one person—as low as it could have been, given the population of the state and number of congressional districts—I did not express any opinion about the character of that deviation. Had the absolute deviation been higher, I would have analyzed the deviation and likely expressed an opinion about it.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: January 18, 2012.

Kenneth R. Maver

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